FEB 4 2002

Watershed Environmental Services, Inc.

P.O. Box 64947 Burlington, Vermont 05406 Office: 802-860-7385 FAX: 802-860-1964 *51

January 30, 2002

Mr. Chuck B. Schwer, Supervisor
Sites Management Section
Waste Management Division
Department of Environmental Conservation
Vermont Agency of Natural Resources
103 South Main Street / West Office Bldg.
Waterbury, Vermont 05671-0404

Re: Vergennes Union Elementary School, Vergennes, VT (Site #96-2122)
Petroleum Contaminated Soil Stockpile Treatment Status Report
Corcoran Property Treatment Site, Green Street, Waltham, VT

Dear Chuck:

I present for your consideration the following status report on the treatment of petroleum-contaminated soils stockpiled on the Corcoran property in Waltham. I am pleased to report that the findings of my December 4, 2001 site inspection indicate that the treatment of the soil stockpiled at the Corcoran site in now complete.

Watershed Environmental Services, Inc. (WES) was retained by the Addison Northwest Supervisory Union in 1997 to monitor the 70 cubic yard-stockpile of no.2 fuel oil contaminated soil undergoing treatment (via polyencapsulation and biocomposting) at the Tom and Donna Corcoran property on Green Street in Waltham, VT. The contaminated soil stockpiled on the Corcoran property was generated in August 1996 during the removal of subsurface no. 2 fuel oil contaminants at the Vergennes Union Elementary School. The contamination was discovered during the replacement of an old underground storage tank (UST) located on the north side of the school building. Post excavation testing at the UST site indicated that the bulk of the petroleum contaminants had been effectively removed from the Vergennes Union Elementary School site.

Pursuant to the soil treatment and monitoring requirements you outlined in your January 21, 1997 letter to Addison Northwest Supervisory Union Business Manager Donna Corcoran, WES periodically visited the Corcoran soil treatment site to physically evaluate the condition of the stockpiled soil and thereby monitor the progress of the treatment program. In addition to the physical inspection, the concentration of volatile organic contaminants in the soil was measured utilizing a photoionization detector (PID). The concentration of petroleum vapors in the stockpiled soil was determined by

photoionization detector headspace screening of soil samples placed in self-sealing plastic bags. In order to obtain a representative sampling of soil conditions, six to eight borings were excavated at different locations throughout the stockpile (top and sides) to facilitate the recovery and evaluation of soil samples from deep inside the stockpile. Summary reports on the status of the soil treatment program at the Corcoran property were submitted to the Sites Management Section on October 9, 1997 and September 21, 1999.

When emplaced at the Corcoran site in August 1996, the contaminated soil removed from the Vergennes Union Elementary School UST site evidenced severe staining/discoloration and exuded fuel oil odors of a moderate strength. Soil vapor levels measured during the polyencapsulation of the fuel oil contaminated soils at the Corcoran property in August 1996 averaged 35 ppm with a peak reading of 60 ppm.

As described in our status report of October 9, 1997, the soil treatment site was inspected on October 6, 1997. PID screening of the stockpiled soil yielded readings ranging from 1.7 ppm to 66.3 ppm. Moderately strong fuel oil odors and moderate soil staining were also noted.

As described in our status report of September 21, 1999, brief site visits performed on June 27, 1998 and October 10, 1998 found that mild petroleum odors were still present in the stockpiled soil. Slight discoloration was also observed at several test locations. Given that the presence of discoloration and detectable odors indicated that further treatment was required, photoionization detector (PID) screening of the stockpile was not performed in 1998.

A complete PID survey of the soil stockpile was completed on August 31, 1999. Eight soil samples were recovered from borings excavated in the top, side and bottom of the soil stockpile and subjected to PID headspace screening. Soils tested at the top and sides of the stockpile yielded no PID-detectable vapors, odors or visible evidence of contamination. However, two soil samples recovered from near the bottom of the stockpile yielded PID vapor levels of 4 ppm and 7 ppm. These soils also exuded a very slight fuel oil odor although no discoloration or staining was visible.

In September 1999 Tom Corcoran utilized a front-end loader to turn the soil stockpile over (at which time additional cow manure as added to the stockpiled soil).

Monitoring performed by WES on September 23, 2000 found that soil vapor levels had declined to an average of 0.2 ppm with a peak reading of 1.1 ppm. Additionally, no staining or petroleum odors were detected in the stockpiled soil.

The most recent monitoring of the soil stockpiled at the Corcoran property was completed on December 4, 2001. Due to unseasonably warm weather, the soil stockpile had not yet frozen. Deep and shallow soil samples were collected at 6 locations in the soil stockpile (see attached sampling diagram) and subjected to inspection and PID screening. No petroleum odors or staining/discoloration were detected in the recovered soil. Additionally, no elevated PID readings were detected in any of the soils at the site.

The results of the monitoring performed by WES at the Corcoran soil treatment site between August 1996 and December 2001 are summarized below in Table 1.

Table 1
Soil Stockpile PID Screening Results Summary

Parameter	Test Date/Results					
	Aug 1996	Oct 1997	Oct 1998	Aug 1999	Sep 2000	Dec 2001
Peak PID (ppm)	60	66.3	-	7	1.1	0.0
Average PID (ppm)	35	22	-	1.4	0.2	0.0
Petroleum odors	Moderate	Moderate	Mild	Slight	None	None
Staining/discoloration	Severe	Moderate	Slight	No	None	None

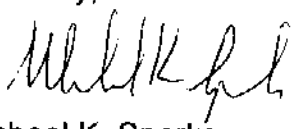
As illustrated by Table 1, the level of contamination in the stockpiled soil has steadily declined over time.

As the December 2001 testing found no evidence of petroleum staining, odor or PID-detectable vapor in the stockpiled soil we conclude that the stockpiled soil has been effectively remediated and submit that the soil treatment program may now be deemed complete. Given that the monitoring history indicates that the level of contamination in the stockpiled soil has declined steadily over time, we submit that the December 2001 testing results are representative of the condition of the stockpiled soil.

Now that all of the contaminated soil removed from Vergennes Union Elementary School UST site has been effectively treated, we recommend that the Sites Management Section consider SMS Site #96-2122 eligible for a Site Management Activity Closed (SMAC) designation.

Please feel free to contact me at 860-1964 or 860-7385 if you have any questions or comments regarding this report or the work performed. Thank you for your consideration.

Sincerely,



Michael K. Sparks
Principal Hydrogeologist

enclosure

cc: Donna Corcoran, Business Manager, Addison Northwest Supervisory Union

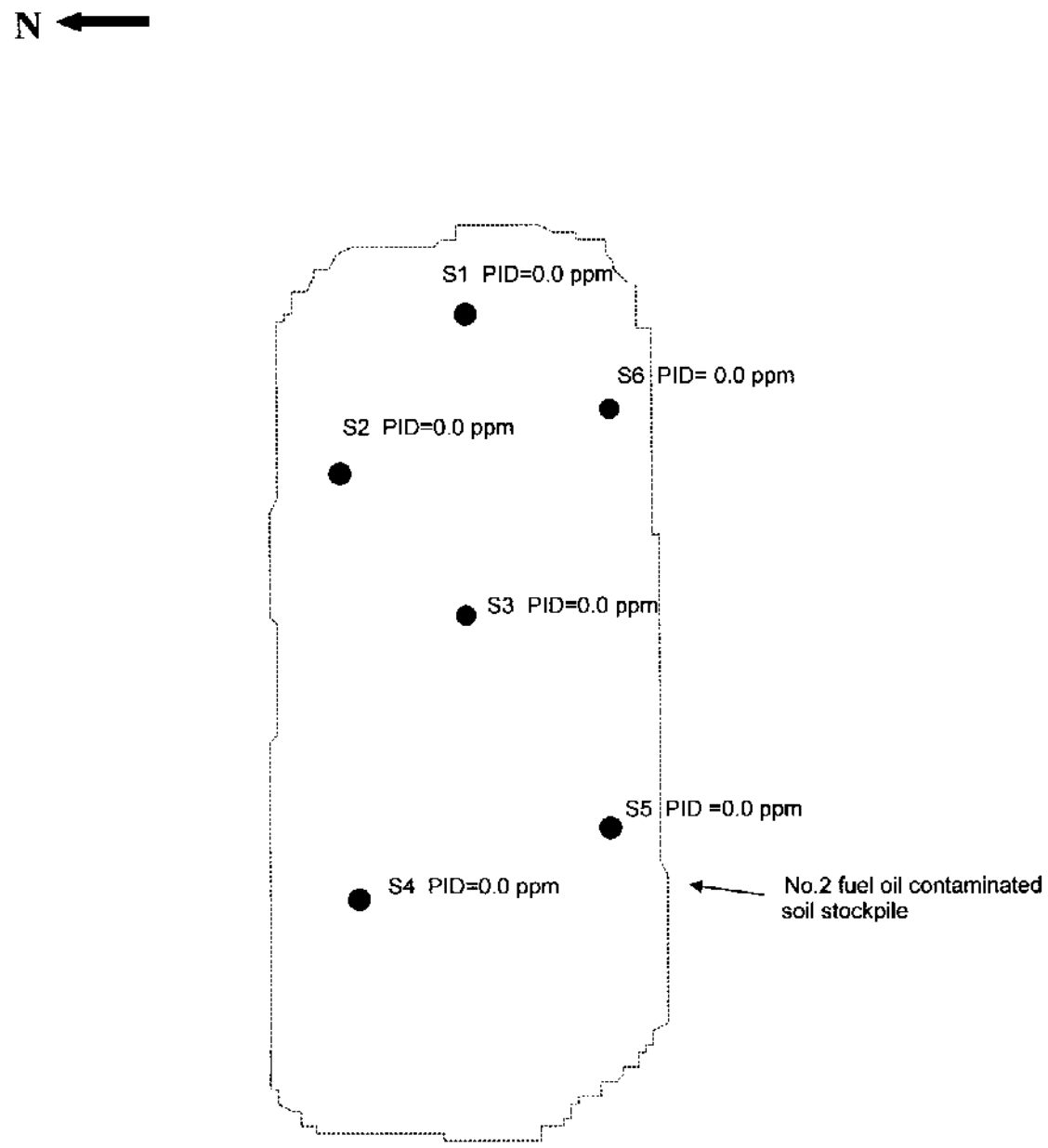
mks/winword/Watershed/Vergennes/report 013002

SOIL STOCKPILE SAMPLE LOCATION MAP

VERGENNES UNION ELEMENTARY SCHOOL SITE #96-2122

CORCORAN PROPERTY SOIL STOCKPILE SITE, GREEN ST., WALTHAM, VT

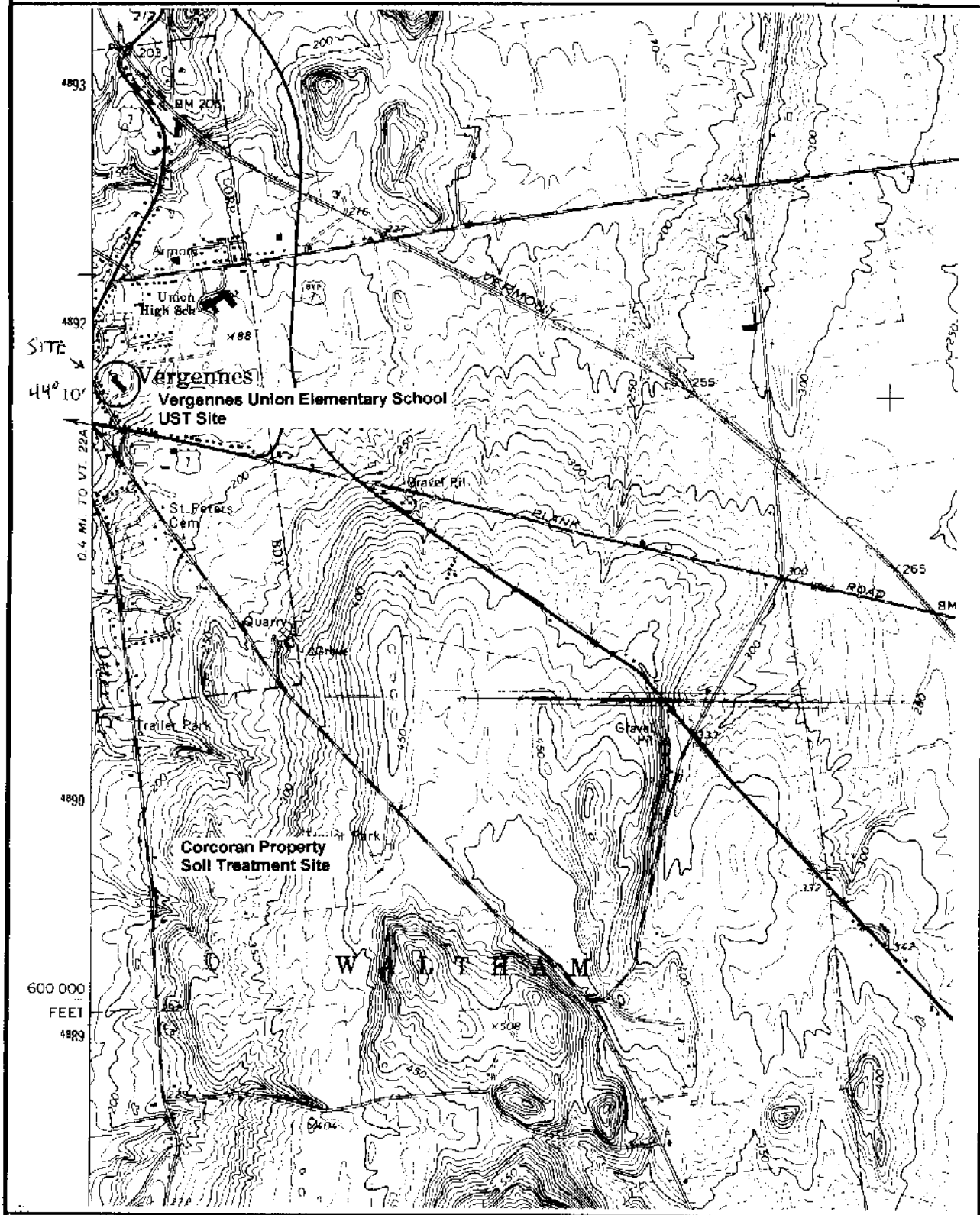
December 4, 2001



Scale: **not to scale**	***Prepared:*** **January 30, 2002**
PID: H-Nu PI-101 w/ 10.2 eV lamp	**WATERSHED ENVIRONMENTAL SERVICES, INC.** **P.O. Box 64947** **Burlington, Vermont 05406**

U.S.G.S TOPOGRAPHIC MAP SECTION - SITE MAP

VERGENNES UNION ELEMENTARY SCHOOL, 43 EAST ST., VERGENNES, VT



Scale: 1: 24,000 *Contour Interval:* 20 ft.

Map Source:
U.S.G.S. Monkton, Quadrangle, 1973
U.S. Geological Survey

Prepared: August 18, 1996

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